

CHAPTER 7 **IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES**

This section describes the irreversible and irretrievable commitments of resources associated with implementation of the proposed action or any of the alternatives. A commitment of resources is irreversible when primary or secondary impacts limit the future options for a resource. It applies primarily to the effects of use of nonrenewable resources, such as minerals or cultural resources, or to those factors, such as soil productivity, that are renewable only over long periods of time. An irretrievable commitment refers to the use or consumption of a resource that is neither renewable nor recoverable for use by future generations. It applies to the loss of production, harvest, or use of natural resources (USFS 1992).

Both irreversible and irretrievable commitments of resources would occur under the action alternatives. An irreversible commitment of land and visual resources would occur within and outside of the Coronado National Forest where relatively undisturbed land would be disturbed by the proposed project. All three corridors within the Coronado National Forest pass through areas rated by the U.S. Department of Agriculture Forest Service (USFS) in the USFS Scenery Management System (SMS) as Scenic Classes 1 through 4. Scenic Classes 1-2 have high public value. The proposed project would introduce human alterations to the natural landscape in areas with currently high or very high Scenic Integrity (areas where the landscape is intact, or appears to be intact, with only minute deviations). The visual resources are irretrievable during the duration of the project because the visual quality would be lost. If the project were removed the area would eventually revert back to its original visual state and the habitat would revert to its original form and function. The U.S. Department of Energy (DOE) does not expect this to occur. Each corridor would be visible from a number of recreation areas. These special use areas represent recreational opportunities where visitors likely have high concern for the landscape.

Placing of the poles and construction of the substations would have irretrievable and irreplaceable impacts on soils, vegetation, hydrology, and cultural resources. Irreversible commitments of resources would include removal of small areas of farmland from potential use for agriculture. Some clearing of cropland may be required during construction of the proposed transmission line, but only the land directly beneath the foundations of the new towers would be irreversibly committed. The loss of soil and productivity would be irreversible where permanent structures are constructed.

The direct loss of vegetation due to clearing and construction is irretrievable but it could be reduced by application of conservation measures. Specific impacts to vegetation would be identified and mitigated upon precise siting of the right-of-way (ROW) within the chosen corridor.

Long-term consequences of changing the hydrology of the watershed and trampling are irreversible and irretrievable although minimal.

Cultural resources are nonrenewable, and disturbance of a site is an irretrievable impact to that resource. Preservation of archaeological sites is possible through cultural resource site avoidance. Data recovery of historic properties eligible for the National Register of Historic Places may be a necessary mitigation measure; however, data recovery is an irreversible use of an historical property, effectively eliminating options for future preservation or study.

Construction of the transmission line structures and substations would require the irretrievable commitment of standard building materials and fuel for construction equipment. Approximately 1 acre-ft of water would be utilized during construction. The resources irretrievably committed for operation of this project would be relatively minor quantities of fuel for maintenance vehicles, operating supplies, and miscellaneous chemicals. Theoretically, construction of facilities (roads, electrical towers) is a reversible commitment of land and water. In practice it is an irretrievable commitment of land use, as the transmission line and its support structures would not be removed.